

We claim :

1. A process for the preparation of polypropylene moulding compound having high impact strength above 30 Kg cm/cm and flexural strength above 330 Kg/cm², which comprises blending polypropylene with another polymer in the range of 20 to 50 wt%, adding a compatibilizer, melt kneading the mixture in presence of a low molecular weight co-polymer, melt extruding the same in a twin screw melt extruder at a temperature in the range of 120 to 180°C to give a polypropylene moulding compound having high impact and flexural strength.
2. A process as claimed in claim 1 wherein the polypropylene used has isotacticity index in the range of 95 to 98.
3. A process as claimed in claim 1 wherein the polymer used for blending is a random co-polymer of ethylene or propylene with butadiene in the ratio of 2:1.
4. A process as claimed in claim 1 wherein the ratio of the polypropylene to the co-polymer is in the range of 2:1 to 5:1.
5. A process as claimed in claim 1 wherein the compatibilizer is a branched polymer containing ethylene and octene units having ethylene to octene ratio of 0.1% to 1%.
6. A process as claimed in claim 1 wherein the concentration of the compatibilizer is in the range of 10% to 50% of the total polypropylene compound.
7. A process as claimed in claim 1 wherein the co-polymer used for melt kneading contains butyl, hexyl or octyl units modified with carboxylic acid, maleic acid and ethylene monomer having minimum melt flow index of 5 gm / 10 min.
8. A process as claimed in claim 1 wherein the temperature used for melt kneading is in the range of 120°C to 180°C
9. A process as claimed in claim 1 wherein the temperature for melt kneading is 160°C.
10. A process as claimed in claim 1 wherein the melt extrusion is carried out at rate of 10 Kg/hr to 36 Kg/ hr at the melt temperature in the range of 180°C to 220°C.
11. A process as claimed in claim 1 wherein a coloring agent is included in the mixture prior to melt kneading.